OCTOBER 1967

35¢

Live Steam

ROBERT SHIMER

Live Steam magazine

OCTOBER 1967 VOL. 1 NO. 10

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COVER PHOTO. Frank Saville and his 1" 0-6-0 take a couple of young passengers across the trestle at the PLZ & W Golden Spike Ceremony.

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Golden Spike Ceremony

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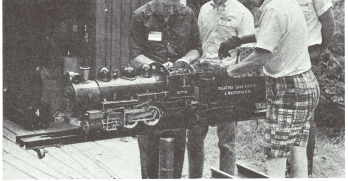


2

at North Barrington

by Donald F. Bauer

PHOTOS BY BOB SHIMER

The day that most of us look forward to at one point or another is the day that we have our track complete for running. Such an event calls for celebration and so it has been through the years.

Frank Saville of 512 Miller Road in North Barrington, Illinois, reached that point and on August 6th, 1967, friends from far and near stopped by (1) to witness the driving of the Golden Spike.

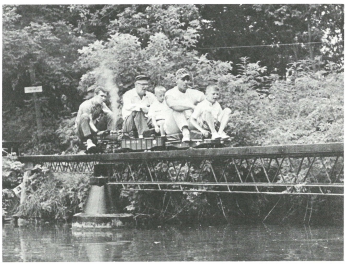
The 4½" track of the Palatine, Lake Zurich & Wauconda R. R. runs about 300 feet out and across a trestle where it forms a return loop of about 550 feet. A round trip run crosses the trestle twice and creates a total of about 1200 feet.

On hand to get operations under way were (2) Ivor Rake, Bob Strand and Bill McDonald (background left to right) shown helping Frank Saville (foreground) get his 1" scale 0–6–0 ready for the day's run.

Although rain fell late in the afternoon, visitors enjoyed a lot of running (3) as Dave Reentz made trips pushing loaded cars across the trestle. Bud Novy (center) and Nick Schawb (right) along with two youngsters found that riding the lead car was not for the chicken-hearted!

To help handle the heavy passenger traffic, Don Bauer with his Woodland Central R. R. 0–4–0 (4) doubleheads with Dave Reentz on the PLZ & W 0–6–0 to pull five cars and ten passengers across the trestle.

The "Big Day" is now history, but you can be sure that there will still be construction of one sort or another on Frank Saville's PLZ & W!



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Austin F. Barr, Jr. to be Mid-West Secretary

Continuing growth is a very good sign in any business, and Live Steam is showing that pattern! As prototype steam gets farther into the past the interest seems to build up in the Live Steam hobby.

Over the past years . . . since Charles A. "Carl" Purinton first generated interest in the Brotherhood in 1932, the voluntary office of Secretary has become a greater and greater responsibility.

Harry Dixon took some of the load off Carl when he offered to handle the responsibility on the West Coast and Ed Kruckeberg took over the balance of the country's Live Steamers a few years ago to relieve Carl.

It's a big job keeping track of all known Live Steamers and putting someone with a problem in touch with another who might have an answer. The job in fact, has become so great that Austin F. Barr, Jr., of Harrisburg, Arkansas, has volunteered to take the work for the Central United States in order that Live Steamers may become better acquainted and get assistance with their problems.

The map shows the states handled by each of the three secretaries and their names and addresses are given so that Live Steamers in each district will know where to write for registration and information that he might not be able to get elsewhere.

Hats off to these three men who give so generously of their time to the Live Steam hobby . . . and a special wave of the signal lantern to Carl Purinton whose efforts 35 years ago helped encourage interest and facilities to make the enjoyment of Live Steam available to so many of us!

BLS NEEDS CANADIAN SECRETARY

Even with the announcement of Austin F. Barr, Jr., as Mid-West Secretary for the Brotherhood of Live Steamers the need for additional assistance is obvious. The hobby continues to grow in Canada, too, and a secretary to handle Canadian Live Steamers would give more direct service to the problems peculiar to that area.

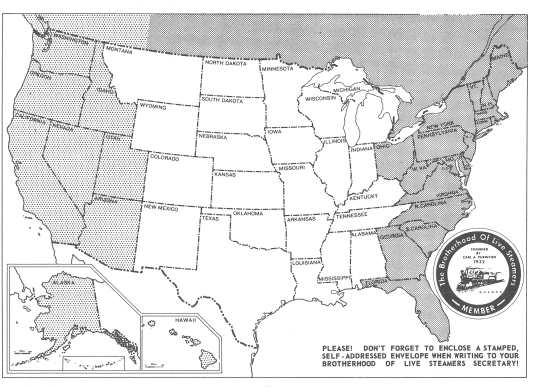
This office is a volunteer position and requires keeping a file of all known Live Steamers and correspondence to the extent of trying to put one Live Steamer with a need in touch with another Live Steamer who might have a solution.

Anyone with the time and interest to tackle this work is invited to contact Edgar W. Kruckeberg, East Coast Secretary, 930 W. Crestwood Road, Scotch Plains, N. J., Westfield P. O., 07090.

HARRY L. DIXON
22075 Berlen Way
Castro Valley
California 94546

AUSTIN F. BARR, JR.
R.F.D. 2
Harrisburg
Arkansas 72432

EDGAR W. KRUCKEBERG
930 W. Crestwood Road
Scotch Plains, N. J.
Westfield, P. O. 07090



PLEASE! DON'T FORGET TO ENCLOSE A STAMPED, SELF-ADDRESSED ENVELOPE WHEN WRITING TO YOUR BROTHERHOOD OF LIVE STEAMERS SECRETARY!

PART TWO

SO YOU WANT TO BUILD A LIVE STEAM LOCOMOTIVE

by Joseph F. Nelson

CHAPTER 7

CYLINDERS AND THEIR MOVING PARTS

Cylinders themselves, while not part of the locomotive structure, become a part of the structure when they are combined with the saddle which supports the front end of the boiler and the smoke box. This has been standard practice since before the turn of the century. Previous to that, the cylinders were bolted to the saddle. During the Civil War period, the saddle had not as yet come into existence since the cylinders were bolted to the smoke box base. With the advent of the piston valve, the cylinders, piston valve cylinders (also called steam chest and valve chamber) and saddle were cast together. However, for practical reasons they were cast in two halves and bolted together. Many of the last locomotives had their frames cast integral with the cylinders and saddle. This effected economies in machining and the Union Pacific claimed that it was also done to eliminate frame breakage. While the idea of casting the frame, saddle and cylinders in one piece looks good from a prototype standpoint, it is impractical for Live Steam when pattern making and foundry work are concerned.

Since Live Steam cylinder castings are small, they are frequently cast in one piece. This prevents them from being bored while being clamped to the face plate of the average small lathe which can be done with the two-piece cylinder castings. If a lathe with a large swing isn't available, it will be necessary to bore the cylinders on an angle plate bolted to the cross feed or carriage of the lathe or bore them in a milling machine. Two-piece cylinders are frequently bored in this manner after they are bolted together. For the average novice, where two-piece castings are available, use them instead of the one-piece castings. It is a little more work: they can be made on smaller machinery, but more care is necessary in preparing the castings. When the two halves are bolted together, the cylinder centers must be located correctly in relation to each other, to the frame centerline, and to the frame cylinder seat. The bores must be aligned parallel to the frame centerline and to each other. To show the center of a cylinder bore for layout, cut wooden plugs to the cast hole size and then drive them into all the cylinder bores flush with the end of the cylinders. This will permit the center of the cylinders to be located accurately.

SLIDE VALVES OR PISTON VALVES

Where the engine builder is purchasing cylinder castings, there are times when he has no choice as to whether it will be piston valves or slide valves. He will have to take whatever is available for the type of engine that he desires to build and this can create a problem if he has a certain prototype in mind. Since most of the modern locomotives had piston valves, simulated piston valve castings with slide valves are available. In some cases, true piston valve castings may be purchased. For the 1" scale engine with slide valves, the Little Engines Switcher cylinder castings may be used (with some modification). For the 1" scale engine, cylinder castings may be obtained in piston valve or simulated piston valve by using the Little Engines castings. For 1½" scale engines, there are slide valve cylinders available for Early American and 1890 period Moguls, true piston valves for the switcher, and simulated piston valves for the Atlantic, Pacific, and the Northern.

Where there is a choice between the slide valve and the piston valve, this writer's choice would be the piston valve for the following reasons:

1. Since the piston valve has inside steam, the valve stem is not under boiler pressure and the valve stem gland is, therefore, no problem as far as steam leaks are concerned.
2. The piston valve, when properly ported, has more area than available slide valve castings.
3. A defective lubricator has little or no effect on the piston valve whereas the same lack of cylinder oil causes a slide valve to stick and gall, creating excessive wear on the overall valve gear.

The last reason, more than anything else, was responsible for the universal change-over from slide valves to piston valves on prototype equipment. When the engine had dry and sticking slide valves, the engineer was in danger of getting hurt if he released the latch on the Johnson Bar to change the point of steam cut-off. Many engineers had bad backs caused by trying to "hook it up" a notch or two when the valves were just a little dry. The balanced slide valve (impractical on Live Steam) did alleviate the problem somewhat, but it was only a step in the transition from slide valves to piston valves. There is one thing in favor of slide valves: There are less parts to make. But either way, if sloppy work is done, a poor running engine will result.

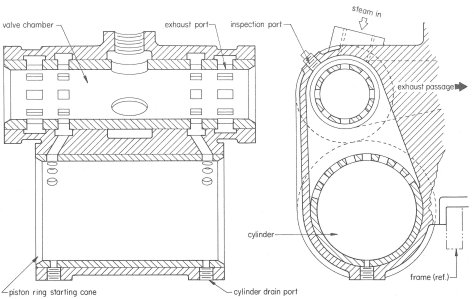
There are ways to get around the lack of suitable cylinders:

1. Make, or have your cylinder pattern made, or
2. Fabricate a simulated cylinder casting.

Both ways require a knowledge of cylinder design. For the first, a knowledge of pattern making is required and also a realization that the core boxes are more of a job than the pattern itself. The second method requires good welding technique and the fitting of many small metal parts into an integrated assembly that must be leak-tight and, where joints happen to be in the ports, a smooth, stepless steam passage must be made. Either way is for the expert artisan and the novice should content himself with what he can purchase; or, perhaps, he could interest some pattern maker or welder in Live Steam and then work out some deal to the advantage of both. This procedure has enabled members of different hobby groups to accomplish objectives that they otherwise would never be able to reach.

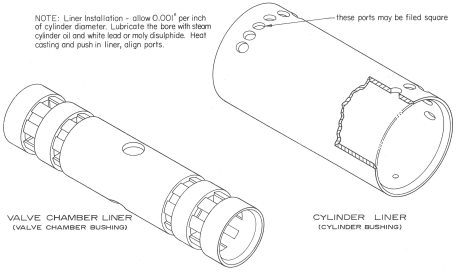
MATERIALS

The choice of materials for cylinders is either cast iron or bronze. Both metals are excellent for cylinder castings and are easy to machine. Cast iron has the disadvantage of being somewhat brittle and if dropped and broken during the machining operation, repair is somewhat of a problem. Also, if any design changes are to be made to simulate prototype design, bronze can be



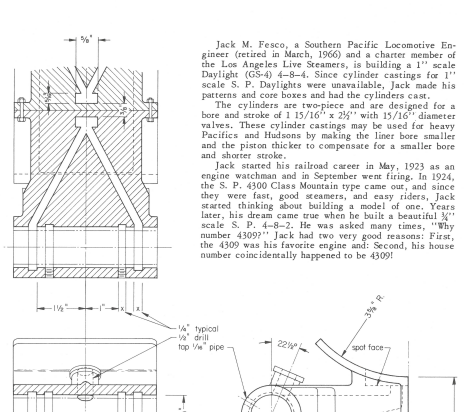
CYLINDERS

NOTE: Liner Installation - allow 0.001" per inch of cylinder diameter. Lubricate the bore with steam cylinder oil and white lead or moly disulphide. Heat casting and push in liner, align ports.



LINERS OR BUSHINGS

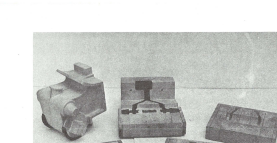
CYLINDER PATTERN AND A SHORT SKETCH OF JACK FESCO



Jack M. Fesco, a Southern Pacific Locomotive Engineer (retired in March, 1966) and a charter member of the Los Angeles Live Steamers, is building a 1" scale Daylight (GS-4) 4–8–4. Since cylinder castings for 1" scale S. P. Daylights were unavailable, Jack made his patterns and core boxes and had the cylinders cast.

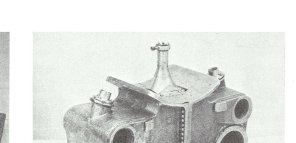
The cylinders are two-piece and are designed for a bore and stroke of 1 15/16" x 2½" with 15/16" diameter valves. These cylinder castings may be used for heavy Pacifics and Hudsons by making the liner bore smaller and the piston thicker to compensate for a smaller bore and shorter stroke.

Jack started his railroad career in May, 1923 as an engine watchman and in September went firing. In 1924, the S. P. 4300 Class Mountain type came out, and since they were fast, good steamers, and easy riders, Jack started thinking about building a model of one. Years later, his dream came true when he built a beautiful 3/4" scale S. P. 4–8–2. He was asked many times, "Why number 4309?" Jack had two very good reasons: First, the 4309 was his favorite engine and: Second, his house number coincidentally happened to be 4309!



GENE HACKLEY

Patterns for the 1" scale cylinder and the core boxes for the Southern Pacific "Daylight" 4-8-4 being built by Jack Fesco.



GENE HACKLEY

Right and left castings have been machined and mated and are now ready for the liners. Proper alignment is discussed in the text.

easily soft soldered or silver soldered. Built-up cylinders may be made of bronze, steel or stainless steel.

Since liners are necessary in the cylinders to keep the piston rings from popping into the ports during operation, cast iron rings and cast iron liners are the best combination for long trouble-free life. Some of the old timers in Live Steam use packing on their pistons and use bronze or brass valve cylinder liners. Since packing pistons is a lost art and very few people can do a good job that will stay put, it is recommended that the novice stay away from piston packing and confine his efforts to doing a good job with cast iron piston rings. Some have been experimenting with Teflon piston rings with very poor success. Teflon can be made to work as a cup but not as a piston ring. If slide valves are used, the combination may be cast iron slide valves with cast iron or bronze cylinders (valve seats); or, bronze slide valves against cast iron, but not bronze against bronze. Forget about aluminum. It is available and cheap at the surplus houses, it machines easily, and is a very good metal with which to build airplanes!

LINER DESIGN

For piston valves, the prototype locomotive uses a short liner in each end of the valve cylinder (valve chamber) with an internal ring compressing cone on each end of the liners. This cone is also on the cylinder liners. This works out fine on the prototype but is not at all practical on model Live Steam locomotives since errors in locating the two liners in relation to each other do not scale down with the result that an error of 1/16" would have no effect upon the prototype, but would seriously affect the lap and lead of a model Live Steam locomotive. For this reason, a single full length liner will provide a more accurate locating of the steam ports on model Live Steam than the two liners per valve chambe. The difference in steam distribution to the valves of the model Live Steam locomotive compared to the prototype is zero, since the model Live Steam locomotive doesn't pull a full-loaded train at maximum speed.

Some novices drill holes in the liners and let it go at that. While this isn't the best practice for the cylinder liners (and the steam into and the exhaust from the valve chamber), it is satisfactory so long as there is enough total area. The valve chamber ports to the cylinders, on the other hand, have other functions in addition to admission and exhaust of steam. Their function is the "as quick as possible" accurate control of the cycle events. This shouldn't be done for obvious reasons; i.e. holes drilled by the novice are usually not accurately located, and, a valve uncovering a round hole increases the area gradually and not suddenly. For this reason, the ports to the cylinders must be either square or rectangular. Incidentally, this also gives a snappier exhause.

When porting the liners, it is advisable to lay out the ports on the outside of the liners and then groove each liner with a square tool to a depth of half the thickness of the liner wall. When drilling the ports, lay out an even number of holes to assist in the filing and use a drill about 1/32" smaller than the groove to permit some drill wandering. A small lead hole of about 1/16" diameter will assist in accurately drilling the final hole. Now, file the hole square, making certain to file carefully to the edge of the groove, and no farther. The groove is for two purposes: First, as a gauge for filing the ports to dimension and, second, to provide a steam passage around the liner at the ports. When boring the valve cylinders, groove the cylinders at all the ports approximately twice the width of the ports and as deep as possible without weakening the cylinder casting. Since a means of setting valves is necessary, tapped holes must be located in the cylinder casting at the groove around the valve ports. For small engines tap 1/16" – 27 pipe threads; for large engines tap 1/8" – 27 pipe threads. When pressing in the liners, make certain that the square holes will align with the inspection holes. These holes have another function besides setting valves. When shutting down after a run, remove the plugs and squirt on oil with the piston valve clear of the port until oil runs out of the cylinder cocks. Repeat until all ports have been taken care of. Move the engine back and forth until the condensate has been forced out of the cylinders and the oil has been well distributed over the cylinder walls. Replace the inspection plugs and close the cylinder cocks. This will prevent rust in the cylinders with resulting piston seizure when an engine has been inoperative between runs. The oil left on the cylinders from operation usually isn't enough to prevent rust. Slide valve engines may have oil injected into the cylinders through the dummy or real snifter valves.

ATLANTIC LIVE STEAMERS RELOCATE TRACK

For the past nine years the Atlantic Live Steamers have operated at the Saint John Exhibition Grounds in Saint John, New Brunswick. On August 5th they made their "last run" and began to cut the track into 30-foot sections in preparation for a move to private property about 15 miles away.

The new site, about two miles east of Rothesay was surveyed on August 12th and the club hopes to have the new track ready for running by the latter part of September.

With the move comes relief from an obligation to open operations to the general public for one week each year, although the experiences were pleasant and many a child's only recollection of operating steam locomotives will be those gleaned from operations at the Exhibition Grounds.

A barbeque and picnic are planned for local Live Steamers on the occasion of the "Re-opening Steam-up" but an invitation is extended to other Live Steamers to visit the new track when it is completed. Daryl Fraser mentions that Bangor, Maine, is only 3 hour's drive from the track site and Portland, Lewiston, Waterville and Augusta, Maine, are all only a half-day's drive. If you plan to be in that area, why not check with Fred Massay, P. O. Box 172, Rothesay, New Brunswick, Canada or Daryl S. Fraser, Compt. 2, S. S. #1, Lakeview Drive, Saint John, East, N. B., Canada for more specific information.

PVLS LISTS NEW OFFICERS

A new slate of officers has been elected at the Pioneer Valley Live Steamers, Incorporated in Southwick, Mass. Taking over duries are:

Ray Peck, President

John Adams, Treasurer

Brenton W. Barnfather, Secretary
3 Fleetwood Drive
Sandy Hook, Conn. 06482

The Annual Fall Meet held by this club will be on October 12–15 at the track site in Southwick and will draw Live Steamers from a wide area. Plan to attend if at all possible.

RUNNING SCHEDULE FOR JAMUL VALLEY RAILROAD CLUB

With the mechanics of organization out of the way, new newly-formed Jamul Valley Railroad Club in San Diego, California, is now getting down to the main reason for its existance: running trains!

An invitation to join this group is extended to all interested persons in the San Diego area and the third Sunday of each month is designated as a Regular Run Day on the 7½" club track.

If you are interested, contact Charles Underhill, Secretary at 4675 Coronado Ave., San Diego, Calif. 92107 for further information.

LIVE STEAM CLUB PROPOSED FOR BUFFALO, NEW YORK

Live Steamers in the Buffalo, N. Y. area are invited to make their presence known and their interest in forming a Live Steam Club.

Fred Bowman (9500 New Oregon Road, Eden, New York 14057) has offered to serve as temporary secretary and point of contact to get the organization under way, intending to construct 3½'', 4¼'' and 7¼'' gauge club tracks.

Fred, along with Ed Tanski and Al Kollman of Buffalo, N. Y., are constructing three 1½" scale models of the Escanaba & Lake Superior 4–6–0 #14 which is now owned by the Arcade & Attica Railroad.

Why not contact Fred right away and see what can be done to help with this proposal.

MONTREAL LIVE STEAMERS HARD AT WORK!

Reading the reports of activity at the MLS track site at Cedars is a stimulating pastime! This group has been without a club track for over three years and all the pent-up energy is now being harnessed! As a matter of fact, the Work Party on July 8th produced a greater number of workers than are on the membership roster and it looks as though there will be some track laid yet this year.

When a group of 16 men put in 81 man-hours in a day, things are bound to develop fast at Montreal!

MICHIGAN STEAM LOCOMOTIVE CLUB FORMED

LYNN BEARCY

Among those Live Steamers present at the organizational meet of the Michigan Steam Locomotive Club were (left to right) Robert Brinkman, host Jack Spalding, J. Bullock and T. W. Harrison.

An organizational meeting at Jack Spalding's track near Monroe, Michigan, on August 19th saw the formation of the Michigan Steam Locomotive Club. 19 Live Steamers were present with several others expressing interest although unable to attend.

J. Bullock of Mr. Morris, Michigan, was elected Chairman pro tem to serve during the organizational period. A preliminary draft of by-laws and incorporation details will be presented to the members at the next meet which will be held in Kalamazoo, Michigan on October 21st, 1967.

While the club name indicates a Michigan group, membership will not be restricted to this geographic location.

For more information about the club and the October meet, contact J. Bullock at 7073 Clio Road, Mt. Morris, Michigan 48458.

LIVE STEAMERS ACTIVE IN NEW ZEALAND

Gavin J. McCabe, Secretary-Treasurer of the Hutt Valley Model Engineering Society, Inc., reports that New Zealand has 13 model engineering clubs with tracks situated throughout the country to serve a population of 2¾ million. Most follow the British practice with raised multi-gauged tracks for 2½", 3½" and 5" gauge. "These tracks would be small by U.S. standards," he says, "ranging from 400 feet to 1,000 feet in continuous circuits."

The majority of locomotives are built to drawings published in the British model engineering magazines although there is an increasing tendency to American, New Zealand and freelance prototypes.

Ground level tracks are not yet prevalent but, fortunately, New Zealand prototype railways are 3' 6" gauge and one is able to build 1½" scale and run on 5" gauge track. Trends have shown that 1" scale has become the most popular, superceding the ¾" scale that was most popular a few years ago.

The Hutt Valley Model Engineering Society has 16 members and operates on a 600 foot kidney-shaped oval. Most of the club's finances are provided by giving the public rides. Member's locomotives have been providing the motive power, although an 0–6–0T engine is being built as a club project.

Club business meetings are held once each month and operations on nearly every weekend during the summer months.

NEW LIVE STEAM CLUB IN FLORIDA

Announcement has been received of the formation of the Pensacola Live Steamers.

On September 9th, 1967, a group of men in that city met for the first time as a group and elected the following officers:

Jim Fannin
President
C. A. Astor, M. D.
Vice President
Harrison H. Green,
Secretary – Treasurer

Others in the area who build or operate Live Steam should make their presence known to

H. H. Green AMSI
HT–8 (wc141) NAAS Ellyson
Pensacola, Florida 32509

It's good to hear of these new groups and we will all look forward to reports of their progress.

Anniversary Run at Gordon MacLean's

Photos and Report by Robert Strand

The occasion was the Annual Golden Spike Anniversary Run at Gordon MacLean's track in Torrance, California on June 18th, 1967 and the Live Steam activity was befitting the affair!

Triple-headers (1) lead by Ed Nelson's Orion Pacific 4–4–0 with a guest engineer and followed by John Noble with his 0–4–2 Plantation engine. John's engine and the one behind it are the basis for a production model to be offered in the future.

"Red" Barrows (2) looks with contemplation at his model of a narrow gauge 0–4–2T that runs on 7½" gauge track.

Bill Fein takes time out from training horses (3) to run Gordon MacLean's 1½" 4–6–2 for the many visitors attending the Anniversary Run.

Ev Clough tends to lubrication in preparation to double-heading a couple of Harpur Moguls (4). Later on Ev (5) takes his son, Gene, and Dick Stern for a leisurely turn around the track. This 1½" 2–6–0 is a joint father-and-son project and speaks well for their efforts.

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NORMAN A. STEELE, 62, of 602 Durham Road, Madison, Connecticut, passed away on July 28th, 1967. He had been ill with cancer.

Norm had been active in Live Steam for 35 years and had been a member of the New England Live Steamers in Danvers, Massachusetts, before joining the Pioneer Valley Live Steamers at its start. He had built seven Live Steam locomotives ranging from ¾" to 1½" scale.

His career began as a fireman on the Old Colony in 1920 and continued until his death when he was a locomotive engineer on the New Haven Railroad, qualified on steam, electric and diesel.

Norm had many friends in Live Steam circles and all will regret his passing.

HOUSE ORGANS FEATURE LIVE STEAMERS

FALL IN is the monthly publication of the San Diego (Calif.) Police Officers Association, Inc. The July 1967 issue gave fine coverage to the Live Steam activities of Officer Harry Haas whose Jamul Valley track has recently become "home" to the Jamul Valley Railroad Club in San Diego. The article included two photos of Harry with his 7½" gauge equipment which includes a diesel switcher and a Harpur Mogul with Walschaert Valve Gear.

IT MAY BE EXPENSIVE BUT IT'S CHEAPER THAN PSYCHIATRY is the title of an article in the July 1967 issue of INTERCOM, bi-monthly magazine of the Universal Oil Products Company in Des Plaines, Illinois. The article features the Live Steam work of David M. Boyd in Clarendon Hills, Illinois on his Sundown & Week End Railroad which accommodates 3½" and 4¾" equipment. Dave, who is head of UOP's Instruments Group, was shown operating his 1" scale 4–6–2 but the article also illustrated the 1½" scale 4–6–4 that is under construction in his basement shop. The Hudson is a joint venture with Dave and his Live Steamer neighbor, Arthur Clyde participating.

Both articles do honor to the Live Steamers that they discuss and may well be instrumental in bringing out heretofore unknowns who also crave the smell of coal smoke mixed with steam and cylinder oil!

EXPLANATION OF SIGNS
* Daily
† Daily, except Sunday
◉ Mail Stop
☐ Handles checked baggage
△ Handles express

A NEW FEATURE

A suggestion – start a page of Letters to the Editor. Many fellows will write you a letter about a topic, often just an observation but not enough to make an article. These are often of great value and interest to others.

We would like to see Bill Treadway's observations on superelevation and read comments on this from other readers.

FRED MASSEY
P. O. BOX 172
ROTHESAY, N. B., CANADA

STRIPED DENIMS

I would like to make a few comments on the "overall" discussion in the July issue of LIVE STEAM. Perhaps this is or was a local preference as I grew up on the Pennsy around Pittsburgh and west to Steubenville, Ohio, where my father had 50 years and 4 months in engine service and he never wore anything but *striped denim!*

I went firing in 1941 and the first purchase on my first payday was two pair (overall and jacket) of the hickory strip variety.

After reading your comments, I got to thinking back about this and checking many photographs. Engine crews wore the "stripes" and the fire-knockers and nut-splitters around the engine house wore the "blue." Track and signal gangs all wore the "blue" also.

The striped denim was a status symbol as I recall, along with the thick, fiber seat-box grip and left no doubt about what this fellow did on the railroad!

KEN PARKINSON
229 N. TRIPHAMMER ROAD
ITHACA, N. Y. 14850

TONNAGE AND A JULIET

My 3½" gauge "JULIET" is in good fettle at the present time and, as I have more or less recovered from a heart attack suffered last summer, I have managed to get a really heavy load behind this loco . . . just curious to see what she will do!

At the last steam up (in fact three of four times) she has hauled a test load of 1,020 lbs., *(2,090 + scale tons. Ed.)* starting unaided on a level track and keeping it up for nearly an hour at a time.

My track is not really the best for this kind of thing, as the curves also have a grade built in and one end has a 1% grade. It sure makes the stack of that little puffer give out music!

As regards fuel: the burning rate on the small grate is very high and the clinkery Welsh hard coal is of little use. (That's the stuff we get here in Toronto.) As this engine can be fired "on the run" she puts up a good show on most of the soft coals and my own preference is a good grade of Pocahontas as it is very much like the Welsh steam coal.

GEORGE HILL
2851 OLD CARRIAGE ROAD
R.R. 1
COOKSVILLE, ONT., CANADA

Scheduled Meets

SEPTEMBER

30 LOS ANGELES LIVE STEAMERS
1 Annual Fall Meet
W. Rees Crawford, Secretary
6900 Royer Street
Canoga Park, California 91304

OCTOBER

12 5th ANNIVERSARY RUN
4¼" Gauge
James L. Banning
3333 Kalawalu Drive
Honolulu, Hawaii 96817

12 PIONEER VALLEY LIVE STEAMERS
13 Annual Fall Meet
14 3½" – 4½" – 7¼"
15 Brenton W. Barnfather, Secretary
3 Fleetwood Drive
Sandy Hook, Conn. 06482

21 MICHIGAN STEAM LOCOMOTIVE CLUB
2nd Organizational Meeting
Harry Harder's track – Kalamazoo
Details from
J. Bullock, Acting Secretary
G-7073 Clio Road
Mt. Morris, Michigan 48058

REGULAR RUN DAYS

GOLDEN GATE LIVE STEAMERS
Every Sunday, Weather permitting
2½" – 3½" – 4½" – 7¼"
Joseph W. Bryan, Secretary
1225 Scott Street
El Cerrito, California 94530

JAMUL VALLEY RAILROAD CLUB
3rd Sunday of each month
7¼" gauge
Charles Underhill, Secretary
4675 Coronado Avenue
San Diego, California 92107

LOS ANGELES LIVE STEAMERS
1st Saturday & Sunday each month
3½" – 4½" – 7¼"
W. Rees Crawford, Secretary
6900 Royer Street
Canoga Park, California 91304

NEW JERSEY LIVE STEAMERS
1st and 3rd Sundays each month
3½" – 4½" – 7¼"
Ralph Green, Secretary
865 Kileyth Road
Elizabeth, New Jersey 07208

PENNSYLVANIA LIVE STEAMERS
2nd Sunday each month, May thru Oct.
2½" – 3½" – 4½"
Frank H. Moore, Jr., Secretary
211 Walnut Street
Wayne, Pennsylvania 19087

SOUTHERN CALIFORNIA LIVE STEAM CLUB
3rd Sunday of each month
3½" – 4½" – 7½"
K. G. Kepner, Secretary
2764 Hayle
Rialto, California 92376

WABASH, FRISCO & PACIFIC ASSN.
Every Sunday – 12" gauge
George F. Kiesel, Jr.
6347 N. Rosebury Avenue
St. Louis, Missouri 63105

ABOUT THE NEW DIRECTORY OF LIVE STEAMERS...

Work has started on the new Directory of Live Steamers and we would like to have all the information in our hands as soon as possible. If you have not already sent in the information called for on the coupon on page 15 of the August, 1967 issue, please do so at once.

NOTICE TO LIVE STEAM CLUB SECRETARIES

For the new Directory, we would like an accurate map showing location and access routes to each Club facility. This, along with regularly scheduled operating days and the name of a person to contact for information, will be included.

...from the cupola

First of all, a most sincere Thank You from Doris, Paul and myself for the hundreds of notes and letters with your renewals. The kind words make the inevitable frustrations of the preparation of LIVE STEAM seem most inconsequential. We'll all be doing our best to make this project bigger and better each month.

"Steam Is Where You Find It," to paraphrase an old song and we have surely found it in Cadillac. Our first guests here at Wildwood Farm were Live Steamer George Atchison with his wife and daughter from Midland; George has an 1½" 4-4-2 almost complete but (understandably) defers work on completion in deference to spending his Saturdays as fireman on the Cadillac & Lake City 2-8-2. Our barber is Leon Dusa who has a 1" scale 4-6-2 ready for the boiler. The plumber on our remodeling project is Basil Moored who has a full-sized Case Steam Tractor and most of our building supplies come from (of all places!) the Roundhouse Lumber Company.

All work on LIVE STEAM and on the remodeling stopped for a couple of hours yesterday when the carpenter called us upstairs to see how the original building was covered over with newspapers before the lath and plaster were put in place. Most of them were dated in the fall of 1895 with a few as far back as 1880 which pretty well dates the house. The papers, which were mostly the Toledo Daily News, carried columns of ads for railroad passenger service and we managed to peel off most of the railroad news. One in particular which might interest many of our readers was the following item in the edition dated October 9, 1895:

"Joseph Bell, who died in England last week, was the veteran locomotive engineer of the world. In his youth he was the engineer of George Stephenson's famous "Rocket," the first locomotive ever constructed."

We've had many reports that the September issue had not been received. We drove down to Birmingham (where we must continue to mail LIVE STEAM until the end of this year) and delivered them to the post office September 2nd. A note from Bob Brinkman (who lives right in Birmingham) advised that his copy was delivered on September 9th! If your September issue hasn't arrived by the time you get this one, don't hesitate to let us know and we will send out a replacement to you.

—W. C. F. —

THE EXTRA BOARD

Items for sale or wanted to purchase by hobbyists. One free ad included with subscription, additional ads 5¢ per word with order.

WANTED

Wanted to buy: Live Steam trains, prefer 12-inch gauge and up but will consider others. We pick up in our own truck and pay cash on the spot — don't have to ask our mother-in-law if we can buy it! Put a realistic price on it and we will buy it. Will also pay $100.00 finders fee if name of seller is furnished, we buy it and haven't already heard about it. Harry J. McMillan, Galva, Illinois.

Set of castings or patterns for PRR K-4 locomotive trailing truck, 50" wheel and tender trucks, all 1½" scale. Paul H. Reichert, 773 Puebla St., Encinitas, Calif. 92024.

1" scale turbo-generator for locomotive — prints, parts or complete. Keith Smith, 1820 Norwood Lane, Arlington, Texas 76010.

Electric trains made before 1941. Will pay top cash. Also want Buddy-L push toys, Al Stauffer, Route 4, Medina, Ohio 44256.

Volumes V and VI Holtzapffels "Turning and Mechanical Manipulation," M. Mc Nally, 1913 Saratoga Avenue, Downers Grove, Illinois.

1903, 1909 Car Dictionary; 1909, 1912, 1938, 1950 Locomotive Cyclopedia; 1908 Signal Dictionary; 1911 Electric Railway Dictionary; 1921 Material Handling Cyclopedia. Carl W. Larson, 24 Forest Ave., Caldwell, N. J. 07006.

¾" scale tender of late style suitable for 4-6-4 Hudson. D. Sobel, 93 Garry Road, Closter, N. J. 07624.

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1½" scale truck castings $40.00 per pair. Photo 25¢. Ben Nixon, 927 Woodland, Southampton, Pa. 18966.

Case Steam Tractor 2" scale. Can be operated by coal or Benzomatic gas, burners are installed and a rack is made to carry the tanks. Built by a toolmaker — a professional job. Has beautifully painted finish. Worth $1,500.00, make an offer. H. J. W. Nelson, 211 S. Lafayette Blvd., Warren, Michigan 48091.

12" gauge, ¾ scale commercial steam locomotive, A-1 condition, state approved. Engine built in 1901. Max Stein, 884 Serena Drive, Pacifica, Calif. 94044.

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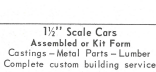

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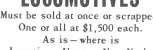

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